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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/658,954 | 09/11/2003 | Jack M. Younse | JMY-1001 | 3515 |

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| EXAMINER | |
|---|---|
| LAI, ANNE VIET NGA | |
| **ART UNIT** | **PAPER NUMBER** |
| 2636 | |

DATE MAILED: 03/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| *Office Action Summary* | **Application No.** 10/658,954 | **Applicant(s)** YOUNSE, JACK M. | |
|---|---|---|---|
| | **Examiner** Anne V. Lai | **Art Unit** 2636 | |

***-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --***

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *11 September 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *11 September 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Osborne** [US. 2004/0113797] in view of **Takada** [US. 4,979,777].

Regarding claim 1, **Osborne** discloses a child car seat assembly, comprising:

a child car seat 28 (fig. 1) being attachable in a seat 24 of a vehicle;

a seat cushion 82 (fig. 8) with pressure switch 84 formed in the seating area of the child car seat; the pressure switch being enabled when a child occupies the child seat ; and

signal wires 86 from the pressure switch routed out of said seat cushion for connecting to a vehicle occupant detection and notification system for use in notifying a person that a child is strapped in said child car seat (figs. 1 and 8; [0036], [0051]).

**Osborne** does not specify the child car seat having a safety belt for securing the child, however it would have been obvious to one having ordinary skill in the art at the time the invention was made the safety belt in a car is required by law in most countries for safety reason, including the safety belt for the child car seat as shown by **Tanaka** (8, 11, 13; fig. 2 and 4; col. 2, lines 49-65).

Regarding claim 2, **Osborne** discloses the seat cushion is a removable cushion with built-in pressure switch for retrofitting in an existing child car seat (seat cushion may be placed on the child seat or front or rear seat of the vehicle ([0051]); the attaching of the cushion to the seat is obvious for the child safety reason.

Regarding claim 3, **Osborne** discloses the assembly comprising a controller unit 94 (fig. 1) for controlling the vehicle occupant detection and notification system (the monitoring system can be permanently retrofitted into the vehicle or can be portable, self-contained, and removable, [0053]).

Regarding claims 4 and 12, **Osborne** and **Takada** disclose a vehicle occupant detection and notification system and a vehicle with child detection and notification system for use in combination with a child car seat (the cushion with incorporated pressure sensor can be placed in a child seat or any car seat [0051] and the monitoring system can be portable [0053]), comprising:

a child car seat (Osborne; fig. 1) being attachable to a seat of a vehicle, having a safety belt for securing a child (Tanaka, fig. 1), and having a built-in seat cushion pressure switch enabled when a child occupies the child car seat (sensing system 40; figs. 1 and 8; [0036]-[0037]);

a controller unit mountable in the vehicle to determine when a child is in the child car seat and a passenger door of said vehicle is open (Osborne; detectable signal generator 44; fig. 6; claim 1c);

a door switch mountable on the driver's door of the vehicle, a signal wire from the door switch being routable to an input of the controller unit for indicating when said door is open (Osborne; exit sensor 48; [0041]);

an internal vehicle alarm being enabled by an output signal from the controller unit for reminding responsible occupants of the vehicle, when a child is in the child car seat and a door of the vehicle is opened (Osborne; claim1c and claim 3; fig. 7; [0047]); and

a wiring harness for routing signal wires from the seat cushion pressure switch 40, the door switches 48, the vehicle's power and chassis ground to inputs of the controller unit 44 and further routing an output signal wire from the controller unit 44 to the internal vehicle alarm (Osborne; figs. 1 and 7); the mating connector for coupling the wiring harness to the pressure switch and the controller unit is inherent since the system is a removable system.

Regarding claim 5, **Osborne** discloses the door switches from two passenger doors (two signal wires output from exit sensors 48, fig. 1) are routed to separated inputs of the controller unit 44, the controller unit enabling the internal vehicle alarm when a child is in the seat and any of the passenger doors are opened (claim 1c and 3; fig. 7). It would have been obvious all passenger doors of the vehicle can be installed with door detection switches as designer choice or user preference.

Regarding claims 6 and 15, **Osborne** further discloses an inside temperature sensor 54 with its output signal being coupled to an additional input of the controller unit

for determining when the temperature inside the vehicle falls above or below a predetermined temperature range (figs. 4 and 5; [0044]; claim 1a).

Regarding claims 7 and 16, **Osborne** discloses a high-volume audible external vehicle alarm (horn 54, [0046]; fig. 7) being enabled by the controller unit when a child is in the seat and the inside temperature of the vehicle is out of range. It would have been obvious the alarm cannot go on forever, it must be reset whether manually by the caregiver being notice of the alarm situation or automatically based on designer choice.

Regarding claims 8 and 18, **Osborne** discloses a variety of internal vehicle alarm types including voice message alarm ([0047]); it would have been obvious, the beeper alarm existing in the car can be used for cost saving purpose.

Regarding claims 9 and 20, **Osborne** discloses the monitoring system can be integrally formed into the vehicle, or alternatively can be portable, self-contained, and removable; therefore it would have been obvious implementing a controller unit being an integral part of the child car seat is based on designer choice ([0053]).

Regarding claims 10 and 19, **Osborne** discloses the seat cushion with built-in pressure switch is retrofitted to an existing child car seat, the cushion may be part of the child seat or may be placed on any seat in the vehicle ([0051]), therefore it would have been obvious one can design a separate seat cushion to be placed on any seat of choice for user convenient purpose.

Regarding claims 13 and 14, **Osborne** discloses the controller unit (monitoring system) can be integrally formed into the vehicle at time of the manufacture or permanently retrofitted, or alternatively, the unit can be portable, self-contained and

removable. Therefore, it would have been obvious based on designer choice, the controller unit functions can be provided by controllers of the vehicle's built-in electrical system, and the cable harness only routes a signal from the seat cushion to the controller unit ([0053], fig. 1).

Regarding claim 17, **Osborne** discloses the external vehicle alarm is the vehicle's existing security alarm ([0046]-[0050]).

3. Claims 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Osborne** and **Takada** in view of **Edwards et al** [US. 6,714,132].

Regarding claim 11, **Osborne** discloses the cushion with incorporated pressure sensor may be part of the child safety seat or may be placed upon the rear or the front seat ([0051]), therefore provision must be made for electrical connecting the sensor to the wiring harness where ever the cushion is placed. **Osborne** does not specify a plurality of child car seats however this feature is taught by **Edwards et al** (figs. 7A, 7B, 8, 9A-9C; col. 7 line 63 through col. 11, line 50). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have provision for more than one child seat in a car for the convenient of a user having than more than one child; and a wiring harness supplies signals from a plurality of child car seats can be implement into a car based on designer choice and user preference.

***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

**Rice** discloses a voice activated vehicle alarm system. [US. 6,028,509]

**Gift et al** disclose warning system for detecting presence of a child in an infant seat. [US. 2004/0212488]

**Rackham et al** disclose a smart occupant alarm system. [US. 2003/0222775]

**Dulin et al** disclose a hot vehicle safety system and methods of preventing passenger entrapment and heat suffocation. [US. 2002/0161501]

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anne V. Lai whose telephone number is 571-272-2974. The examiner can normally be reached on 8:00 am to 5:30 pm, Monday to Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hofsass Jeffery can be reached on 571-272-2981. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A. V. Lai

February 25, 2005

JEFFERY HOFSASS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600